Jefferson County Land & Water Conservation Department 2014 - 2015 Annual Report

Jefferson County Land & Water Conservation Committee

Matt Foelker (Chairman), Carlton Zentner (Vice Chair), Pete Hartz (Secretary), Ed Morse (Member), Frank Anfang (FSA Rep)

Conservation in Jefferson County

Since 1946, Jefferson County has been providing assistance to landowners to protect our soil and water quality. In 1982, the County officially established the Jefferson County Land & Water Conservation Department (LWCD). The department has been charged with administering State Statutes and County ordinances all leading to the conservation and protection of our natural resources. We are pleased to provide you with our 2014 - 2015 annual report. Anyone wishing further information on any of our programs is welcome to stop in or call the Land & Water Conservation Department for more details.

Land & Water Resource Management Plan



As required by the State Land & Water Conservation Board, the Land & Water Conservation Department submitted for approvals the 2016 - 2020 LWRMP in August 2015. The plan outlines the current workload activities to be undertaken by the LWCD over the next 5 years. A full plan rewrite will be due in January of 2021.

The Land & Water Conservation Board (LWCB or Board) has taken a series of actions based on a 2011 change to ATCP 50.12 authorizing approval of a land & water resource management (LWRM) plan for up to ten years. The Board first set up criteria for obtaining a ten year approval of a LWRM plan, either by the county securing a full ten year approval of a newly revised plan, or a five year extension of a LWRM plan previously approved for five years. These pro-

cedures also describe the requirements for the review of plan implementation activities applicable to counties after they receive a ten year approval or before they can receive a four or five year extension.

The full plan can be found here: http://www.jeffersoncountywi.gov/departments/departments f-r/ land and water plan.php

Avian Influenza

The avian influenza was first detected on a Jefferson County poultry farm on April 13, 2015. Three locations, operated by two different entities, were impacted. The Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) successfully implemented a coordinated response with the facility owners, the U.S. Department of Agriculture (USDA), and other state agencies to contain and eliminate the disease at those sites. The affected farms were immediately quarantined and the 1.1 million birds in the flocks were depopulated.

Avian influenza, or "bird flu," is a virus that infects domestic poultry, such as chickens, turkeys, pheasants, quail, ducks, geese, and wild birds, particularly waterfowl. Direct contact with infected birds, contaminated objects/equipment and aerosol (short distances) can spread the virus which is found in feces, saliva and respiratory secretions.



*Poultry Operations in Jefferson County

The LWCD lent support to the virus extermination efforts. Mapping & information was distributed. Daily contact with the Wisconsin DNR was maintained as clean up & disinfection efforts continued.

More information can be found at http://datcp.wi.gov/Animals/Animal Diseases/Avian Influenza/index.aspx.

Farmland Preservation in Jefferson County

On January 1, 2010, the new Wisconsin Farmland Preservation Program under the Working Lands Initiative went into effect, offering many farm owners greater tax relief and more protection of our State's soil and water resources. Under Working Lands Initiative, landowners receive a tax credit on their Wisconsin Income Taxes for being in compliance with State Conservation Standards.

Prior to 2010, the tax credit was determined by a formula based on income and amount of property tax paid. Under the new program, the tax credit is a flat per acre rate. In Jefferson County, most landowners receive \$7.50 per acre. Those landowners who are located in an Ag Enterprise Area (AEA) can sign a 15 year agreement with the State and receive \$10.00 per acre. Jefferson County has one AEA which is located in parts of Palmyra and Sullivan Townships.

Under the new program, farm owners must comply with Wisconsin Statue NR 151 Non-point Runoff rules. There are essentially three requirements to the rules:

- All farms must have and follow an approved conservation plan.
- All farms must have and follow an approved nutrient management plan.
- All livestock farms must meet manure management prohibitions and performance standards.

In Jefferson County, the Department has evaluated all participating landowners for compliance. The Wisconsin Department of Ag, Trade and Consumer Protection (DATCP) had mandated the Department to issue a Certificate of Compliance to all landowners who fully meet the conservation standards by the December 31, 2015. Currently we have issued approximately 550 Certificates of Compliance. Of the remaining landowners, a small number of them are working to meet the standards.

Farmland Preservation Program (FPP) and Working Lands Initiative (WLI)

In June of 2015, DATCP reviewed the Department's Farmland Preservation management. The Department was found to be on-track with meeting the compliance standards and ahead of most other counties in compliance with the standards, especially in implementing nutrient management planning. Below is a summary of Farmland Preservation in Jefferson County:



- Current Participants: 668
- Number of Acres Enrolled: 110,435
- Number of Farms Monitored for Conservation Compliance in 2015: 191
- Number of Certificates of Compliance Issued to Landowners: 571
- Number of Notices of Noncompliance Issued from September 2014 to Present: 24
- Number of Cancelations of Non-Compliance Issued from September 2014 to Present: 9
- Tax Credits Returned to Jefferson County Landowners Based on \$7.50 /Acre: \$828,263
- Additional Tax Credit of \$2.50/Acre for Land Under AEA Agreement: \$1,146
- New Enrollments as of January 1, 2015: 13

Nutrient Management and Farmer Training

Wisconsin Statue NR 151.07 as well as the Farmland Preservation Program required that all cropland where nutrients are applied be covered by a nutrient management plan. Plans are typically written by private Crop Consultants. State Statutes allow landowners to write their own plan if they attend a Wisconsin Department of Ag approved training course.

Since December of 2010, Land & Water Conservation Staff have conducted 9 full nutrient management classes, training 74 landowners/farmers. 1 full class was offered this past winter. Additionally staff holds Update classes to assist students in maintaining their plans and updating to the latest software. To date, 12 Update classes have been held. 4 of those have been held in the 2014/2015 winter months. Full classes consist of four half-day sessions. Update classes are one three-hour session.

As part of a complete nutrient management plan, producers with livestock a required to calibrate their manure spreaders to more accurately credit the nutrients being applied to the land. Through a grant funded by the Wisconsin Department of Ag, Jefferson County was able to purchase a set of weigh pads. In the last year Department Staff have calibrated 3 manure spreaders.

Nutrient Management and Livestock

Under State Statute NR 151, agricultural producers are required to follow conservation performance standards. These rules regulate manure management and require the use of soil conservation and nutrient management plans by all producers. Additionally under State Statute and County Ordinance, livestock producers wishing to start or expand a herd of over 150 animal units (one animal unit equals 1,000 pounds of animal weight) must apply for a Livestock Siting Conditional Use Permit. The Department works cooperatively with the Zoning Department on these permits

If livestock producers are not expanding their animal numbers but are building, modifying or abandoning manure storage facilities, the Department requires a permit under the County Manure Storage Ordinance.

For the 2014 - 2015 report year, the Department:

- Issued 2 permits for closure of manure storage facilities.
- Reviewed 6 new Livestock Siting Permit applications, as well as 4 amended applications and provided a completeness determination to the Zoning Department and Land & Water Conservation Committee.
- Conducted 6 inspections for livestock related regulations in both NR 151 and the Farmland Preservation Program.
- Investigated 7 manure management related complaints with corrective action taken as needed.
- Cost shared with landowners for 2 proper closures of unused manure storage facilities, 2 roof runoff systems for an animal lot, 1 manure transfer basin, 1 waterway, 1 diversion, and 1 rock crossing.
- Cost shared with 4 landowners for nutrient management planning on approximately 1,120 acres.
- Received checklists covering 1,242 farms with a nutrient management plan (NMP) for compliance with State Statue and County Ordinance.

Soil Conservation

Part of the mission of the Jefferson County Land & Water Conservation Department (LWCD) is to insure that farmland remains productive for generations to come. Through cooperative partnering with the Natural Resources Conservation Service (NRCS) and the Farm Service Agency (FSA), the LWCD works with Jefferson County producers to recommend and install Best Management Practices that will control soil loss and improve water quality. The Land and Water Conservation Department:

- Data acquired at nearly 500 locations with 780 active farming locations.
- 86.7% of the cropped acreage at or below tolerable soil loss (T), nearly the same as the previous year.
- Average countywide soil loss is 2.3 tons/acre/year. The Oconomowoc River Watershed continues to show the highest amount of soil loss at nearly 1.7 x the County wide average, but the watershed only accounts for 2.8% of the land mass.
- 40% of cropland was planted to corn, up slightly from 39% in 2014.
- 27% of cropland was planted to soybeans, slightly down from 28% in 2014.
- 6% of cropland was in small grains (wheat, oats, etc.), up from 5% in 2014.
- Hay made up 16% of the cropland, which is similar to 2014.
- 6% of cropland was found fallow, compared to 5% in 2014.
- 61% of the cropland was either no tilled, minimum tilled or had an alfalfa/hay crop.
- 37% of the cropland showed less than 30% crop residue, while nearly 37% having 30% residue or over.
- 18% of the land was no-tilled, up from a couple of points from the previous 3 year average.
- Less than 1% conventional tillage (moldboard plow) system used.

Data sources: WinTransect software application ver. 1.18.1.0 UW Soils Department and data input by LWCD staff.

Agricultural Conservation Easements (PACE)

- Finalized transition of the Land & Water Conservation Department's administration and assistance for the Farmland Conservation Easement Commission.
- Department assisted with determining State agricultural standard compliance by inspecting 6 properties.
- Under guidance of the County Farmland Conservation Easement Commission, modified guidelines & best practices for Baseline Property Reports and annual monitoring.
- Compliance Monitoring: 4 donated easement properties, 1 easement for a cooperating agency and land trust, and 1 easement held by the County.
- Reviewed public records relevant to agriculture, natural resources and easement compliance on the covered land.
- Preliminary work on baseline study report for 1 property with proposed closing slated for late summer 2015. Prepared initial baseline study for a property and assisted with overall easement compliance.

Non-Metallic Mining

To operate a non-metallic mine (sand, gravel, stone, and topsoil) for commercial extraction, quarry owners must apply for a Non-Metallic Mining Permit. Part of the permit process is the submission of a reclamation plan detailing how the land will be restored when the quarry is no longer in use. During the report year:

- Fees collected; \$12,295 of which \$2,330 was reimbursed to the DNR and remainder \$9,965 earmarked for LWCD administrative expenses.
- 33 sites inspected to include active, inactive, recently reclaimed, and exempt extraction sites.
- Inspected site characterizations: Active; 1-5 acres 6 permits; 6-10 acres 4 permits, 11-15 acres 5 permits, 16-25 acres 3 permits; 26-50 acres 2 permits; >50 acres 3 permits. Inactive; 1 site. Exemption; 5 sites.
- Permit Transfers & Approvals: 1 permit transfer approved and Financial Assurance updated; 1 reclamation review and nearing final permit approval.
- Under the direction and guidance of Corporate Counsel, continued working toward resolution involved with the BR Amon receivership proceedings.
- Maintained all changes in GIS database and associated tabular data.
- Prepared Annual Newsletter to provide information and updates to operators and landowners.
- Attended 3 DNR organized training events and meetings.

Sources: WDNR NR135, Jefferson County Nonmetallic Mining Ordinance & onsite inspections.

Geographic Information and Cartography

- Updated approximately 3,600 parcels in the database management system for State Ag Run-off Rule (NR 151) compliance. This provides a cohesive data repository for the Working Lands Initiative (WLI) compliance.
- Conversion of department datasets (Access/Excel) to an updated database system (SQL Server) per the Land Records Modernization Plan.
- Utilized the FPP landowner database to assist in quality control of the countywide parcel dataset of participants and combined information from related tabular datasets (spreadsheets).
- Developed an automated DATCP approved parcel compliance sheet using the report generation tools available in SQL Server. The reporting tools will assist in building additional reports and documents per end user requirements.
- Published and maintained internet map services consumed by web map viewers to provide end users with location and attribute information. Implemented a test web application using department generated data, with the intent of providing specific information for the department.
- Developed maps, combined data, and provided information for the Oconomowoc River Watershed Improvement Program. Specifically utilized DNR mapping tools, while incorporating County data.
- Update Frozen Parcel data for County Zoning purposes. Created and maintained all Conservation Easement Parcels. Updated and created several recreational trail datasets for County Park's analysis and display.
- Provided mapping and data compilation for PACE applications also see Agricultural Conservation Easement.
- Continued to implement database improvements and consolidation.
- Supported updates of GIS data for the Lake Ripley Management District.
- Attended and participation in over 40 hours of training/seminars directly related to GIS, land records and database administration.

Grants and Budgets

Much of the funding for the Jefferson County Land & Water Conservation Department comes from the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). The Department actively looks for outside sources of revenue to reduce the amount of County Levy dollars requested.



- Applied for and received operational grants from the DATCP totaling \$170,067.
- The certification and permit fees generate approximately \$19,343 in revenue to the LWCD.
- Received \$32,500 in Land and Water Resource Management cost sharing dollars from DATCP.
- Received \$28,000 in State Grant funding from DATCP for nutrient management cost sharing.
- Generated \$8,814 in gross revenue from the Annual Tree & Shrub sale.
- New County Farm Lease generates \$105,668 annually.

Water Resources

Maintaining and enhancing ground water and surface water quality is critical to the health, safety and recreational fulfillment of residents and visitors of Jefferson County. The Department has implemented the following water resources activities:

Clean Boats and Clean Waters

Trained citizen volunteers and paid staff for Lake Ripley, Rock Lake, and Lower Spring Lake to educate lake users on the laws associated with Aquatic Invasive Species. Assisted the Town of Lake Mills in applying for a DNR grant to hire 2 inspectors.

Lake Ripley

Provided feedback on projects, reports and grant applications to the Lake Ripley Management District.

Lower Spring Lake Aquatic Plant Management

Continued to work on a DNR grant for the Lower Spring Lake Management District to implement their aquatic plant management plan. The grant covers expenses incurred by the LWCD for work on the project. Educated citizens about aquatic plants and water quality. Conducted a whole lake plant survey in August 2014. Conducted a May 2015 plant survey prior to chemical treatment of the lake. All activities are done with the cooperation of the DNR and the Lower Spring Lake Management District.

Oconomowoc Phosphorus Reduction

Provided information and feedback to the City of Oconomowoc for their program to reduce phosphorus delivery to the Oconomowoc River.

Rock Lake Dam

Assisted the City of Lake Mills with planning and hosting 2 public listening sessions regarding the fate of the Rock Lake dam. A large number of citizens attended (approx. 100). The sessions led to a better understanding of the options and a decision by the City to build a new dam and open the spillway.

Rock Lake Shoreland Survey

Wrote and received a DNR grant to assess the conditions of the shoreland and nearshore areas of Rock Lake. The survey is scheduled to be done in 2015.

Rock Lake Shoreland Rules

In partnership with the Rock Lake Improvement Association and the Joint Rock Lake Committee, provided feedback to the City of Lake Mills on proposed zoning ordinance language that impacts surface water resources.

Rock Lake Tour

In partnership with the Rock River Coalition and the Rock Lake Improvement Association, organized a tour of Rock Lake that included education stations on water quality monitoring, native shoreland gardens, fish, and aquatic plants. There were 30 participants.



Rock Lake Under Ice

Worked with the Rock Lake Improvement Association to organize and implement lake education associated with the Lake Mills Knickerbocker Ice Festival.

Rock Lake Water Quality Monitoring

In the summer, perform monthly water quality sampling with a citizen to monitor temperature, dissolved oxygen, clarity, chlorophyll and phosphorus.

Stream Monitoring

Assisted the Rock River Coalition at a stream monitoring training workshop for citizens - 17 attended. Worked with citizen volunteers to monitor streams in Jefferson County. In 2014, there were 15 citizens who volunteered at 10 sites on 8 streams in the County. In 2015, there are 23 people stationed at 14 sites on 11 streams in the County. There are 5 more citizens that still need to be placed after adequate sites are found. Parameters monitored include temperature, dissolved oxygen, clarity, flow, and biotic index (based on the type of insects in the water). This work performed by citizens gives us information on the resources that we don't have time/money to gather ourselves.

Jefferson County Zoning Department

Assisted with communications to citizens regarding shoreland-related issues.

Assistance to Various Landowners, Organizations, and Local Governments

Work included communications regarding manure spreading concerns, manure management, lake and stream quality, water levels, water recreation, aquatic invasive species, shoreline erosion control, wetland rules, and ground water quality.

Wildlife & Habitat

The Land & Water Conservation Department engages in the following activities to enhance wildlife habitat:

- Assists the DNR with the Wildlife Damage and Abatement Program that reimburses crop producers for damages caused by deer, geese and turkey.
- For the 2014/2015 program year, 8,100 trees/shrubs were sold through the Annual Sale. Nine species were offered through the sale which starts in the fall of each year.

LEAN Projects & Continuous Quality Improvement

Identified and began implementation of LEAN | CQI Projects:

- Process for Conservation Plan Revisions & Updates:
 - ° Will improve efficiency in completing plan revisions.
- Quadrant File System Implemented for Farmland Preservation Annual Field Inspections:
 - ° Consolidated approach to inspections showed savings in fuel and travel time.

Looking Ahead to 2015 - 2016

As ever, the Department will strive to meet the concerns of the citizens of Jefferson County and protect our soil and water resources.

Future Goals and Activities:

- Offer additional training and update sessions for farmers to write their own nutrient management plans.
- Continue to monitor the presence of the Emerald Ash Borer in Jefferson County.
- Department Director continued participation in County Advisory Committee with NRCS and FSA.

Staff will begin evaluating Farmland Preservation participants for compliance with the new NR 151 rules that include:

- Tillage setback: No tillage operations may be conducted within 5 feet of the top of the channel of surface waters.
- Phosphorus index: Croplands, pastures, and winter grazing areas shall average a phosphorus index of 6 or less over the accounting period and may not exceed a phosphorus index of 12 in any individual year within the accounting period.
- Process wastewater handling: There may be no significant discharge of process wastewater to waters of the state.
- · Pastures needing nutrient management plans.



Jefferson County LWCD

Pictured left to right:
Kim Liakopoulos, Administrative Clerk
Mark Watkins, Director
Nancy Lannert, Resource Conservationist
Gerry Kokkonen, GIS/Land Use Specialist
Patricia Cicero, Water Resources Mgmt Specialist
Joe Strupp, Resource Conservationist

Partnering Agencies & Contacts: The Jefferson County Land & Water Conservation Department works cooperatively with a number of State and Federal Agencies. The following is a list of those agencies.

Farm Service Agency (FSA) (920) 674-2020 US Dept of Ag (APHIS) (800) 433-0663 DATCP

Bureau of Land & Water Resources (608) 224-4621 DNR Conservation Wardens
Ryan Ellifson
(920) 728-0367
Pearl Wallace

(920) 728-6605

DNR Foresters Randy Stampfl (920) 387-7884

DNR Lakes Monitoring Coordinator
Susan Graham
(608) 275-3329

Working Lands Initiative Contacts

State Website: http://workinglands.wi.gov
State Email: DATCPWorkingLands@Wisconsin.gov

"In conservation, the motto should always be 'never say die'."

~ Gerald Durrell